

1 CLAIMS

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5 1. A stone cutting system, comprising:
6 a retaining unit having at least one trough for receiving a plurality of stone
7 members; and

8 a cutting unit having at least one blade, wherein said at least one blade is
9 capable of being extended within said at least one trough for cutting a plurality of
10 stone members into a plurality of stone pieces.

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13 2. The stone cutting system of Claim 1, wherein said at least one trough is
14 comprised of an elongate structure.

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17 3. The stone cutting system of Claim 1, wherein said at least one trough has a
18 uniform width.

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21 4. The stone cutting system of Claim 1, wherein said at least one trough has an
22 adjustable width.

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25 5. The stone cutting system of Claim 1, wherein said at least one trough has a
26 first end and an opposing second end.

1 6. The stone cutting system of Claim 1, wherein said at least one trough
2 includes a compression member that is capable of compressing a plurality of stone
3 members in a longitudinal manner.
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6 7. The stone cutting system of Claim 6, wherein said compression member is
7 positioned within an end of said at least one trough.
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10 8. The stone cutting system of Claim 6, including at least one actuator unit
11 attached to said compression member.
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14 9. The stone cutting system of Claim 1, wherein said at least one trough
15 includes a floor.
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18 10. The stone cutting system of Claim 9, wherein said floor includes a plurality
19 of slots that allow for the passing through of a plurality of cut stone pieces.
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22 11. The stone cutting system of Claim 10, wherein said plurality of slots are
23 substantially parallel to a longitudinal axis of said at least one trough.
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26 12. The stone cutting system of Claim 9, wherein said floor is movably
27 attached to said retaining unit for allowing the passing through of a plurality of cut
28 stone pieces.
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2 13. The stone cutting system of Claim 1, wherein said retaining unit is
3 movably positioned with respect to said cutting unit along a path substantially
4 transverse to a cutting path of said cutting unit.
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7 14. The stone cutting system of Claim 1, including a conveyor unit positioned
8 beneath said retaining unit for transferring a plurality of cut stone pieces.
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11 15. The stone cutting system of Claim 1, wherein said cutting unit is comprised
12 of a gang saw.
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15 16. The stone cutting system of Claim 1, wherein cutting unit is movable in a
16 vertical manner.
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19 17. The stone cutting system of Claim 1, wherein said cutting unit is movably
20 in a horizontal manner substantially parallel to said at least one trough.
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23 18. A method of cutting a plurality of stone members, said method comprising:
24 positioning a plurality of first stone members within a first trough; and
25 cutting said plurality of first stones within said elongated trough.
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28 19. The method of cutting a plurality of stone members of Claim 18, including
29 cutting a plurality of second stone members within a second trough.